UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,262	12/15/2003	Mario Besek	HAWE-56US	6449

26875 7590 06/14/2006

WOOD, HERRON & EVANS, LLP
2700 CAREW TOWER
441 VINE STREET
CINCINNATI, OH 45202

EXAMINER	
KILKENNY, PATRICK J	

ART UNIT	PAPER NUMBER
3732	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/736,262	BESEK ET AL.	
	Examiner	Art Unit	
	Patrick J. Kilkenny	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/20/2006*. 2/17/04
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 1/20/2006 are noted. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 13, 15, and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Torino (2,653,598). Torino discloses a dental instrument capable of distributing restorative material comprising a handle (10) a first working end (12b), and a substantially uniform cylindrical first roller tip (15) attached to, and rotatable about an axis of, the first working end. This roller tip is also removable or permanent (Column 3, lines 65-72), and is made of a thermoplastic elastomer (i.e. synthetic resin), as well as the handle and working end (Column 2, lines 47-50 and Column 3, lines 9-11). It is also disclosed that there is a bushing or a roller element bearing (14, 33, and 34) between the first working end and the roller tip, in which the first roller tip rotates relative to the

first working end by the bushing or roller element bearing. There are clip portions (35) of the bushing that engage recesses/ridges in the first working end (Column 4, lines 16-27).

Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner (5,611,687). Wagner discloses a dental instrument for distributing restorative materials with a hand (12), a first working end (26), and a first roller tip (60). The center axis of the handle and the first working end are coaxial and the first roller tip rotates about an axis of the first working end.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3, 6, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torino in view of Varaine (5,118,291). Torino discloses the claimed invention with the exception of an additional interchangeable first roller tip, the first working end being at an angle of 45-90 degrees from handle center axis, the roller tip having a Shore A hardness in the range of 20-60, and the roller tip having a tapered cylindrical shape. Varaine teaches dental instrument capable of distributing restorative material on a tooth with interchangeable and cylindrically tapered tips (7) having a Shore A hardness of 50-60 that is attached to a first working end (3) that is at a 45-90 degree angle with respect to the center axis of the handle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plurality, the shore hardness, and the shape of the roller tips, as well as the angle of working end relative to the handle, as taught by Varaine, in order to obtain a distributing dental device with multiple tips for disposal with an ideal shore hardness to apply pressure to the teeth, as well as having a shape and angle of attack to fit into various recesses among the teeth.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torino in view of Watmough et al. (4,735,604). Torino discloses the claimed invention with the exception of using polytetrafluoroethylene as a friction-reducing additive for reducing friction of the roller end. Watmough et al. discloses an aspirator for use with a dental drill (Column 8, lines 12-17) in which the bushings are coated with polytetrafluoroethylene do reduce the kinetic coefficient of friction to facilitate movement (Column 3, lines 43-47). Therefore it would have been obvious to modify the device of

Torino with a coating of polytetrafluoroethylene, as taught by Watmough et al., since it is known that polytetrafluoroethylene is an ideal material to decrease friction between moving parts, such as in bushings. With respect to the %wt of polytetrafluoroethylene and the exact kinetic coefficient of friction, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use 2-30%wt or 5-15 %wt to obtain a kinetic coefficient of friction of 0.2, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claim 11, the office takes Official Notice that is obvious to reinforce any handle or body with glass or carbon fibers to increase the strength of said handle.

Claims 20-21, 23-26, 38, 40, 42-43, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torino. Torino discloses the claimed invention with the exception of a second working end and roller tip according to the same specifications as listed above. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the assembly of Torino having a plurality of roller assemblies, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Claims 22, 27, 39, 41, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torino as applied to claims 20, 26 and 38 above, and further in view of Varaine. Torino discloses the claimed invention with the exception of an additional

interchangeable first or second roller tip, the second working end being at an angle of 45-90 degrees from handle center axis, the roller tips having a Shore A hardness in the range of 20-60, and the roller tips having a tapered cylindrical shape. Varaine teaches dental instrument capable of distributing restorative material on a tooth with interchangeable and cylindrically tapered tips (7) having a Shore A hardness of 50-60 that is attached to a first working end (3) that is at a 45-90 degree angle with respect to the center axis of the handle. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plurality, the shore hardenss, and the shape of the roller tips, as well as the angle of the second working end relative to the handle, as taught by Varaine, in order to obtain a distributing dental device with multiple tips for disposal with an ideal shore hardness to apply pressure to the teeth, as well as having a shape and angle of attack to fit into various recesses among the teeth.

Claims 28-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torino as applied to claim 26 above, and further in view of Watmough et al. Torino discloses the claimed invention with the exception of using polytetrafluoroethylene as a friction-reducing additive for reducing friction of the roller ends. Watmough et al. discloses an aspirator for use with a dental drill (Column 8, lines 12-17) in which the bushings are coated with polytetrafluoroethylene do reduce the kinetic coefficient of friction to facilitate movement (Column 3, lines 43-47). Therefore it would have been obvious to modify the device of Torino with a coating of polytetrafluoroethylene, as taught by Watmough et al., since it is known that polytetrafluoroethylene is an ideal

material to decrease friction between moving parts, such as in bushings. With respect to the %wt of polytetrafluoroethylene and the exact kinetic coefficient of friction, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use 2-30%wt or 5-15 %wt to obtain a kinetic coefficient of friction of 0.2, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claims 47-59 rejected under 35 U.S.C. 103(a) as being unpatentable over Torino in view or Varaine, and further in view of Watmough et al. Torino discloses a dental instrument capable of distributing restorative material comprising a handle (10) a first working end (12b), and a substantially uniform cylindrical first roller tip (15) attached to, and rotatable about an axis of, the first working end. This roller tip is also removable or permanent (Column 3, lines 65-72), and is made of a thermoplastic elastomer (i.e. synthetic resin), as well as the handle and working end (Column 2, lines 47-50 and Column 3, lines 9-11). It is also disclosed that there is a bushing or a roller element bearing (14, 33, and 34) between the first working end and the roller tip, in which the first roller tip rotates relative to the first working end by the bushing or roller element bearing. There are clip portions (35) of the bushing that engage recesses/ridges in the first working end (Column 4, lines 16-27). Torino does not disclose a second roller assembly with an angled second working end and an identical roller tip and means for rolling and connection, as well as additional roller tips that are interchangeable, a tapered shape to the roller tips, a Shore A hardness of 20-60 for the roller tips. Varaine

teaches dental instrument capable of distributing restorative material on a tooth with interchangeable and cylindrically tapered tips (7) having a Shore A hardness of 50-60 that is attached to a first working end (3) that is at a 45-90 degree angle with respect to the center axis of the handle. Torino also does not teach using polytetrafluoroethylene as a friction-reducing additive for reducing friction of the roller ends. Watmough et al. discloses an aspirator for use with a dental drill (Column 8, lines 12-17) in which the bushings are coated with polytetrafluoroethylene do reduce the kinetic coefficient of friction to facilitate movement (Column 3, lines 43-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the plurality, the shore hardness, and the shape of the roller tips, as well as the angle of the second working end relative to the handle of Torino, along with a coating of polytetrafluoroethylene, as taught by Varaine and Watmough et al., in order to obtain a distributing dental device with multiple tips for disposal with an ideal shore hardness to apply pressure to the teeth, as well as having a shape and angle of attack to fit into various recesses among the teeth and to decrease friction between moving parts, such as in the bushings. With respect to the %wt of polytetrafluoroethylene and the exact kinetic coefficient of friction, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use 2-30%wt or 5-15 %wt to obtain a kinetic coefficient of friction of 0.2, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for prior art of record. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Kilkenny whose telephone number is (571) 272-8684. The examiner can normally be reached on Mon-Fri, 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patrick J. Kilkenny
Art Unit 3732
June 9, 2006
6/9/06

PJK

PATRICIA BIANCO
PRIMARY EXAMINER
6/12/06